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Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings,

of claims in the application.

Listing of claims:

1.   (currently amended) An apparatus for describing three-dimensional image data,

comprising:

a descriptor database for storing descriptors describing characteristics of the

three-dimensional image data at an acquisition procedure, a representing procedure,

and a display procedure;

a descriptor adding means for reading in **at least one of [[a]] an acquisition**

descriptor**, a representing descriptor, and a display descriptor** describing the

characteristics of the three-dimensional image data inputted from outside at each step

and adding the descriptor to the three-dimensional image data; and

a registration means for registering the three-dimensional image data with the

descriptor endowed by the descriptor adding means in a three-dimensional image data

database.

2.   (currently amended) The apparatus as recited in claim 1, wherein the descriptor

adding means includes:

an acquisition descriptor adder for reading in [[an]] --the-- acquisition descriptor

that describes a step of acquiring the three-dimensional image data from the descriptor

database and adding the acquisition descriptor to the three-dimensional image data;

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a representing descriptor adder for reacing in [[a]] --the-- representing descriptor

that describes a step of representing the three-dimensional image data from the

descriptor database and adding the representing descriptor to the three-dimensional

image data; and

a display descriptor adder for reading in a representing the display descriptor

that describes a step of displaying the three-dimensional image data from the descriptor

database and adding the display descriptor to the three-dimensional image data.

3.   (original) The apparatus as recited in claim 2, wherein the descriptor database

includes an individual descriptor database that stores the acquisition descriptor for

describing the step of acquiring the three-dimensional image data, the representing

descriptor for describing the step of representing the three-dimensional image data, and

the display descriptor for describing the step of displaying the three-dimensional image

data.

4.   (original) The apparatus as recited in claim 3, wherein the descriptor database

further includes an integrated descriptor database that stores integrated descriptors

defined as a particular combination of the acquisition descriptor, the representing

descriptor and the display descriptor, and

wherein the descriptor adding means further includes an integrated descriptor

adder for reading in an integrated descriptor from the integrated descriptor database

and adding the integrated descriptor to the three-dimensional image data.

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PAGE 3/17 * RCVD AT 4/30/2008 12:45:06 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/44 * DNIS:2738300 * CSID:312 427 6663 * DURATION (mm-ss):03-20

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5.   **(currently amended)** A method for describing three-dimensional image data,

comprising the steps of:

a) a descriptor adding unit recognizing characteristics of the three-dimensional

image data at an acquisition procedure, a representing procedure, and a display

procedure;

b) the descriptor adding unit reading in **<u>at least one of an acquisition</u>**

<u>descriptor, a representing descriptor, and a display descriptor</u> ~~descriptors~~ for

describing characteristics of the three-dimensional image data at each step based on

the recognition from a descriptor database;

c) the descriptor adding unit adding the descriptors to the three-dimensional

image data; and

d) the descriptor adding unit registering the three-dimensional image data

endowed with the descriptors in a three-dimensional image data database.

6.   **(currently amended)** The method as recited in claim 5, wherein, at [[the]] step

a), the descriptor adding unit recognizes characteristics of steps of acquiring,

representing, and displaying the three-dimensional image data and, at [[the]] step b),

the descriptor adding unit reads in [[an]] --the-- acquisition descriptor for describing the

acquisition procedure, [[a]] --the-- representing descriptor for describing the

representing procedure, and [[a]] --the-- display descriptor for describing the display

procedure based on the recognition.

7.   **(currently amended)** The method as recited in claim 6, further including the

steps of:

e) the descriptor adding unit determining whether there is an integrated

descriptor defined as a particular combination of [[an]] --the-- acquisition descriptor,

[[a]] --the-- representing descriptor, and [[a]] --the-- display descriptor; and

f) the descriptor adding unit reading in the integrated descriptor from an

integrated descriptor database and adding the integrated descriptor to the three-

dimensional image data.

8.   (currently amended) A computer-readable recording media for recording a

program that implements a three-dimensional image data description method in a three-

dimensional image data description provided with a processor, comprising the steps of:

a) a descriptor adding unit recognizing characteristics of the three-dimensional

image data at an acquisition procedure, a representing procedure, and a display

procedure;

b) the descriptor adding unit reading in **at least one of an acquisition**

descriptor, a representing descriptor, and a display descriptor descriptors for

describing characteristics of the three-dimensional image data at each step based on

the recognition from a descriptor database;

c) the descriptor adding unit adding the descriptors to the three-dimensional

image data; and

d) the descriptor adding unit registering the three-dimensional image data

endowed with the descriptors in a three-dimensional image data database.

9.   (**currently amended**) The computer-readable recording media as recited in claim 8, further including the steps of:

e) the descriptor adding unit determining whether there is an integrated descriptor defined as a particular combination of [[an]] --the-- acquisition descriptor, [[an]] --the-- representing descriptor, and [[an]] --the-- display descriptor; and

f) the descriptor adding unit reading in the integrated descriptor from an integrated descriptor database and adding the integrated descriptor to the three-dimensional image data.

10.   (**currently amended**) An apparatus for retrieving three-dimensional image data, comprising:

an input means for receiving data on characteristics of the three-dimensional image data from a user at an acquisition procedure, a representing procedure, and a display procedure;

a descriptor database for storing descriptors based on the characteristics of the three-dimensional image data at the acquisition procedure, the representing procedure, and the display procedure;

a descriptor abstraction means for abstracting out of the descriptor database **at least one of** [[a]] **an acquisition** descriptor**, a representing descriptor, and a display descriptor** corresponding to the data inputted from the input means;

a descriptor comparison means for comparing the descriptor abstracted from the descriptor abstraction means with descriptors of three-dimensional image data stored in a three-dimensional image data database, and retrieving three-dimensional image data

matched with the abstracted descriptor; and

an output means for outputting the three-dimensional image data retrieved by the

descriptor comparison means to the user.

11.   (currently amended) The apparatus as recited in claim 10, wherein the

descriptor abstraction means includes an individual descriptor abstracter for abstracting

individual descriptors, which include [[an]] --the-- acquisition descriptor for describing a

step of acquiring the three-dimensional image data, [[a]] --the-- representing descriptor

for describing a step of representing the three-dimensional image data, and [[a]] --the--

display descriptor for describing a step of displaying the three-dimensional image data,

from the descriptor database.

12.   (original) The apparatus as recited in claim 11, wherein the descriptor database

includes an individual descriptor database for storing the acquisition descriptor for

describing a step of acquiring the three-dimensional image data, the representing

descriptor for describing a step of representing the three-dimensional image data, and

the display descriptor for describing a step of displaying the three-dimensional image

data.

13.   (original) The apparatus as recited in claim 12, wherein the descriptor database

further includes an integrated descriptor database for storing integrated descriptors

each of which is defined as a particular combination of the acquisition descriptor, the

representing descriptor and the display descriptor, and

wherein the descriptor abstraction means further includes an integrated

descriptor abstracter for abstracting out of the integrated descriptor database an

integrated descriptor corresponding to the data inputted from the input means.

14.   (currently amended) A method for retrieving three-dimensional image data,

comprising the steps of:

a) receiving data on characteristics of the three-dimensional image data to be

retrieved from a user at an acquisition procedure, a representing procedure, and a

display procedure;

b) a descriptor abstracting unit abstracting **at least one of [[a]] an acquisition**

descriptor**, a representing descriptor, and a display descriptor** matched with the

inputted data out of a descriptor database that stores descriptors matched with the

characteristics of the three-dimensional image data at the acquisition procedure, the

representing procedure, and the display procedure;

c) a descriptor comparison unit comparing the abstracted descriptor with

descriptors of three-dimensional descriptors stored in a three-dimensional image data

database and retrieving three-dimensional image data matched with the abstracted

descriptor; and

d) an output unit outputting the three-dimensional image data retrieved by the

descriptor comparison unit.

15.   (original) The method as recited in claim 14, wherein the characteristics of the

three-dimensional image data to be retrieved are inputted by the user at the image

acquisition step, the image representing step, and the image display step in the step a)

and

wherein the descriptor abstracting unit abstracts descriptors matched with the

data inputted from the descriptor database that stores the acquisition descriptor for

describing the image acquisition step, the representing descriptor for describing the

image representing step, and the display descriptor for describing the image display

step in the step b).

16.   (currently amended) The method as recited in claim 15, further including the

steps of:

e) the descriptor abstracting unit determining whether there is an integrated

descriptor which is defined as a particular combination of [[an]] --the-- acquisition

descriptor, [[a]] --the-- representing descriptor, and [[a]] --the-- display descriptor; and

f) the descriptor abstracting unit abstracting the integrated descriptor out of an

integrated descriptor database based on the result of the step e).

17.   (currently amended) A computer-readable recording medium for recording a

program that implements a three-dimensional image data retrieving method in a three-

dimensional image data retrieving apparatus provided with a processor, comprising the

steps of:

a) receiving data on characteristics of the three-dimensional image data to be

retrieved from a user at an acquisition procedure, a representing procedure, and a

display procedure;

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b) a descriptor abstracting unit abstracting **at least one of [[a]] an acquisition** descriptor**, a representing descriptor, and a display descriptor** matched with the inputted data out of a descriptor database that stores descriptors matched with the characteristics of the three-dimensional image data at the acquisition procedure, the representing procedure, and the display procedure;

c) a descriptor comparison unit comparing the abstracted descriptor with descriptors of three-dimensional descriptors stored in a three-dimensional image data database and retrieving three-dimensional image data matched with the abstracted descriptor; and

d) an output unit outputting the three-dimensional image data retrieved by the descriptor comparison unit.

18.   (**currently amended**) The computer-readable recording medium as recited in claim 17, further including the steps of:

e) the descriptor abstracting unit determining whether there is an integrated descriptor which is defined as a particular combination of [[an]] --the-- acquisition descriptor, [[a]] --the-- representing descriptor, and [[a]] --the-- display descriptor; and

f) the descriptor abstracting unit abstracting the integrated descriptor out of an integrated descriptor database based on the result of the step e).